ABSTRACT

Methods and devices for controlling and managing data flow and data transmission rates. A feedback mechanism is used in conjunction with measuring output transmission rates to control the input transmission rates, changing conditions can be accounted for an excess output transmission capacity can be shared among numerous input ports. Similarly, by using maximum and minimum rates which can be requested from an output port, minimum transmission rates can be quaranteed for high priority traffic while capping maximum output rates for low priority traffic. By combining the two ideas of feedback rate control and placing maximum requestable transmission rates, a more equitable output sharing mechanism arises. The measured output transmission rate is used to control and recalculate the maximum requestable output transmission rate for incoming flows, thereby allowing for changing network and data flow conditions.